



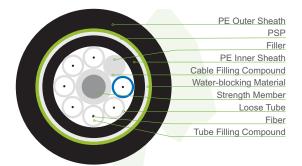
PRODUCT DATA SHEET

Stranded Loose Tube Cable with Steel Tape (Double Sheaths) (GYTY53)



Introduction

In the Nitrotel GYTY53 cable, single-mode/multimode fibers are positioned in the loose tubes, which are made of high modulus plastic materials, while the loose tubes strand together around metallic central strength member into a compact and circular cable core. For certain high fibre count cables, the strength member would be covered with polyethylene (PE). The waterblocking materials are distributed into interstices of the cable core . The cable core is covered with a PE inner sheath, and the PSP is longitudinally applied around the cable core before a HDPE outer sheath is extruded over it.



Fiber color code

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|--------|-------|-------|------|-------|---|-------|--------|--------|------|------|
| Blue | Orange | Green | Brown | Gray | White | | Black | Yellow | Violet | Pink | Aqua |
| Fiber color in each tube starts from No. 1 Rhue | | | | | | | | | | | |

Color codes for loose tube & filler rod

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--|--------|---|-------|------|-------|---|-------|--------|--------|------|------|
| Blue | Orange | | Brown | Gray | White | | Black | Yellow | Violet | Pink | Aqua |
| Tube color in each layer starts from No. 1 Blue. If there are fillers, the color is nature | | | | | | | | | | | |

Tube color in each layer starts from No. 1 Blue. If there are fillers, the color is nature

Order Information and Characteristics of Optical Cables

| Cable Type (increased by 2 fibers) | Fiber Count | Tube & Fillers | Max. No. of Fibers in each Tube | Cable Diameter mm | Cable Weight kg/km | Tensile Strength Long/ShortTerm N | Crush Resistance Long/ShortTerm N/100 mm |
|---------------------------------------|-------------|----------------------|---------------------------------------|-------------------------|--------------------------|---|--|
| NT-GYTY53-2~36Xn | 2~36 | 6 | 6 | 12.6 | 184 | 1000/3000 | 1000/3000 |
| NT-GYTY53-38~72Xn | 38~72 | 6 | 12 | 14.0 | 216 | 1000/3000 | 1000/3000 |
| NT-GYTY53-74~96Xn | 74~96 | 8 | 12 | 15.7 | 260 | 1000/3000 | 1000/3000 |
| NT-GYTY53-98~120Xn | 98~120 | 10 | 12 | 17.4 | 301 | 1000/3000 | 1000/3000 |
| NT-GYTY53-122~144Xn | 122~144 | 12 | 12 | 19.0 | 354 | 1000/3000 | 1000/3000 |
| NT-GYTY53-146~216Xn | 146~216 | 18 | 12 | 19.0 | 350 | 1000/3000 | 1000/3000 |

Note:

1.Suffix Xn denotes fiber type and see details in Nitrotel cable coding illustration.

- 2. The color arrangement of fiber and tube is specified in color identification table.
- 3. The normal PE sheath thickness is 1.0mm, and PE outer sheath thickness is 2.0mm.

Characteristic

- Excellent mechanical and temperature performance guaranteed by the accurate excess fiber length
- Critical protection to fibers, based on the excellent hydrolysis resistance and strength performance of tube
- material and special filling compound filled in the tube
- Excellent crush resistance and flexibility
- The following measures are taken to ensure the water blocking performance of the cable:
- Single steel wire used as the central strength
- member
- Special water-blocking filling compound in the loose tube
- 100% cable core filling
- PSP moisture barrier
- Water-blocking material
- Application: Duct/Aeria

| | Oper | ation | -40°C~+70°C | |
|--------------------------|--------------|----------------------------|-------------|--|
| Temperature requirement | Install | ation | -10°C~+70°C | |
| | Storage/trar | sportation | -40°C~+70°C | |
| Temperature cycling test | con | form to IEC 7 | 94-1-F1 | |
| | Static | 10 times of outer diameter | | |
| Bending Radius | Dynamic | 20 times of outer diameter | | |

Fig 2 and 3: High Fiber Count Cable







PE Outer Sheath

PE Inner Sheath

Strength Member

Loose Tube

PE Sheath

Fiber

Water-blocking Material

Tube Filling Compound

Cable Filling Compound

PSP